

In the Specification

Please replace the paragraph beginning at line 11 on page 1 with the following replacement paragraph:

Extensible Markup Language (XML) is a text-based markup language that is designed to make information self-describing. XML is designed to improve the functionality of the Web by providing more flexible and adaptable information identification. It is called extensible because it is not a fixed format like HTML (a single, predefined markup language). Instead, XML is actually a “metalanguage”, i.e., a language for describing other languages, which lets you design your own customized markup languages for limitless different types of documents. XML can do this because it's written in Standard Generalized Markup Language (SGML), the international standard metalanguage for text markup systems (ISO 8879).

Please replace the paragraph beginning at line 1 on page 4 with the following replacement paragraph:

The Cascading Stylesheet Specification (CSS) provides a simple syntax for assigning styles to elements, and has been implemented in most browsers. The Extensible Stylesheet Language (XSL) has been created for use specifically with XML. XSL uses XML syntax (an XSL stylesheet is an XML file) and has widespread support from several major vendors, although current browser support is limited. XSL comes in two flavors. XSL is a pure formatting language and needs a text formatter like Formatting Objects Processor (FOP) or PassiveTeX to create printable output (both can produce PDF). XSLT (T for Transformation), is a language to specify transformations of XML into HTML either inside the browser or at the server before transmission. It can also specify transformations from one vocabulary of XML to another, and from XML to plaintext.

Please replace the paragraph beginning at line 1 on page 6 with the following replacement paragraph:

As the Web became more commercial, publishers wanted the same control over quality of output that they had with the printed medium. This gradually led to an increasing use of concrete presentation controls such as explicit fonts and absolute positioning of material on the page. The unfortunate but entirely predictable side effect was that it became increasingly difficult to deliver the same content to alternative devices such as digital TV sets and Wireless Application Protocol (WAP) phones. Until now, in order to control printing, content providers used stylesheets, as described above, to control the rendering, e.g. fonts, colors, leading, margins, typefaces, and other aspects of style, of a Web document without compromising its structure. To print XML data is to apply a stylesheet, such as XSL, to the data using an XSLT processor. This processor outputs formatted objects, which are then input to a composer that generates final-form pages. These pages are then converted into a page description language (PDL) such as PostScript, Portable Document Format (PDF), or Advanced Function Presentation (AFP). Nevertheless, stylesheets are cumbersome and do not allow a user to print XML data efficiently and quickly. In a production system, for example, print speeds exceed 1000 pages/minute. Transforming XML data with an XSL stylesheet is processing-intensive and does not support such print speeds.